

## AMENDMENTS TO THE CLAIMS

The following is a complete listing of revised claims with a status identifier in parenthesis.

### LISTING OF CLAIMS

1. (Currently Amended) A method for simulation of a technical system, comprising:

optimizing a set of setting parameters for a required function, the required function being based on the set of setting parameters and a first set of setting constants, the set of setting constants being static during the optimizing, and the set of setting parameters being for design and reaction of the technical system;

~~determining a result, in the form of an influence of the parameters on the technical system,~~ as a function of ~~[[a]]~~ the set of setting parameters and based on the basis of a request to an external source, the result being in the form of an influence of the set of setting parameters on the technical system;

temporarily storing the result; and

simulating the technical system based on the ~~basis of the~~ result and ~~[[of]]~~ the setting constants; ~~wherein~~

~~the parameters are optimized for a required function, the required function depending on the parameters for configuration or reaction of the technical system and the setting constants that are static during optimization, and wherein~~

~~the required function is optimized with regard to its parameters and afterwards an influence of the setting constants during simulation is taken into account separately from the optimization.~~

2. (Previously Presented) The method as claimed in claim 1, further comprising:

designing the technical system on the basis of the simulation.

3. (Previously Presented) The method as claimed in claim 2, wherein the design process includes at least one of an adaptation of, a change to, and a redesign of the technical system.

4. (Currently Amended) The method as claimed claim 1, further comprising:

redetermining the influence of the set of setting parameters on the technical system by accessing the temporarily stored result.

5. (Currently Amended) The method as claimed in claim 1, wherein the influence of each of a plurality of sets of setting parameters on the technical system is determined by checking the external source, and wherein the result of this check is temporarily stored.

6. (Previously Presented) The method as claimed in claim 5, wherein an additional influence is determined on the basis of the temporarily stored results.

7. (Previously Presented) The method as claimed in claim 6, wherein the additional influence is determined by at least one of interpolation and extrapolation.

8. (Previously Presented) The method as claimed in claim 6, wherein the additional influence is determined from the results using a neural network.

9. (Previously Presented) The method as claimed in claim 1, wherein the external source is at least one of a simulator and an experiment.

10. (Previously Presented) The method as claimed in claim 1, wherein the simulation is carried out using a plurality of results, without the external source.

11. (Currently Amended) The method as claimed in claim 1, further comprising:

determining, from the simulation of the technical system, the sensitivity of sets of setting parameters to changes in the setting constants.

12. (Currently Amended) An arrangement for simulation of a technical system, comprising:

a processor unit configured to,

optimize a set of setting parameters for a required function,  
the required function being based on the set of setting parameters  
and a set of setting constants, the set of setting constants being  
static during optimizing, and the set of setting parameters being  
for design and reaction of the technical system,

determine a result as a function of the set of setting  
parameters and based on a request to an external source, the  
result being in the form of an influence of the set of setting  
parameters on the technical system, and

simulate the technical system based on the result and the  
setting constants; and

~~wherein a required function depends on parameters and~~  
~~setting constants, wherein the processor unit is adapted to~~  
~~determine a result in the form of an influence of the parameters on~~  
~~the technical system as a function of a set of parameters and on~~  
~~the basis of a request to an external source; and~~

a memory, adapted to temporarily store the result, ~~wherein~~

~~the processor unit is adapted to simulate the technical system on~~  
~~the basis of the result and of the setting constants; wherein~~

~~the parameters are optimized for the required function, the required function depending on the parameters for configuration or reaction of the technical system and the setting constants that are static during optimization, and wherein~~

~~the required function is optimized with regard to its parameters and afterwards an influence of the setting constants during simulation is taken into account separately from the optimization.~~

13. (Currently Amended) A computer readable medium on which executable instructions are recorded, the executable instructions causing a processor unit to execute a process of simulating a technical system, wherein a required function depends on parameters and setting constants, the executable instructions comprising:

a first program segment, ~~adapted~~ configured to cause the processor unit to,

optimize a set of setting parameters for a required function, the required function being based on the set of setting parameters and a set of setting constants, the set of setting constants being static during optimizing, and the set of setting parameters being for design and reaction of the technical system,

determine a result as a function of the set of setting parameters and based on a request to an external source, the

result being in the form of an influence of the set of setting parameters on the technical system, and

simulate the technical system based on the result and of the setting constants; and

~~determine a result, in the form of an influence of the parameters on the technical system, as a function of a set of parameters and on the basis of a request to an external source;~~

a second program segment, adapted to cause the processor unit to ~~cause the temporarily store the result to be temporarily stored; and~~

~~a third program segment, adapted to cause the processor unit to simulate the technical system on the basis of the result and of the setting constants; wherein~~

~~the parameters are optimized for the required function, the required function depending on the parameters for configuration or reaction of the technical system and the setting constants that are static during optimization, and wherein~~

~~the required function is optimized with regard to its parameters and afterwards an influence of the setting constants during simulation is taken into account separately from the optimization.~~

14. (Currently Amended) The method as claimed claim 2, further comprising:

redetermining the influence of the set of setting parameters on the technical system by accessing the temporarily stored result.

15. (Currently Amended) The method as claimed claim 3, further comprising:

redetermining the influence of the set of setting parameters on the technical system by accessing the temporarily stored result.

16. (Currently Amended) The method as claimed in claim 2, wherein the influence of each of a plurality of sets of setting parameters on the technical system is determined by checking the external source, and wherein the result of this check is temporarily stored.

17. (Previously Presented) The method as claimed in claim 16, wherein an additional influence is determined on the basis of the temporarily stored results.

18. (Previously Presented) The method as claimed in claim 17, wherein the additional influence is determined by at least one of interpolation and extrapolation.

19. (Previously Presented) The method as claimed in claim 17, wherein the additional influence is determined from the results using a neural network.

20. (Previously Presented) The method as claimed in claim 2, wherein the external source is at least one of a simulator and an experiment.

21. (Previously Presented) The method as claimed in claim 2, wherein the simulation is carried out using a plurality of results, without the external source.

22. (Currently Amended) The method as claimed in claim 2, further comprising:

determining, from the simulation of the technical system, the sensitivity of sets of setting parameters to changes in the setting constants.

23. (Previously Presented) The arrangement of claim 12, wherein the processor unit is further adapted to design the technical system on the basis of the simulation.

24. (Previously Presented) The arrangement of claim 23, wherein the design process includes at least one of an adaptation of, a change to, and a redesign of the technical system.

25. (Currently Amended) The arrangement of claim 12, wherein the processor unit is further adapted to redetermining the influence of the set of



setting parameters on the technical system by accessing the temporarily stored result.

26. (Currently Amended) The arrangement of claim 12, wherein the influence of each of a plurality of sets of setting parameters on the technical system is determined by checking the external source, and wherein the result of this check is temporarily stored.

27. (Previously Presented) The arrangement of claim 26, wherein an additional influence is determined on the basis of the temporarily stored results.

28. (Previously Presented) The arrangement of claim 27, wherein the additional influence is determined by at least one of interpolation and extrapolation.

29. (Previously Presented) The arrangement of claim 27, wherein the additional influence is determined from the results using a neural network.

30. (Previously Presented) The arrangement of claim 12, wherein the external source is at least one of a simulator and an experiment.

31. (Previously Presented) The arrangement of claim 12, wherein the

simulation is carried out using a plurality of results, without the external source.

32. (Currently Amended) The arrangement of claim 12, wherein the processor unit is further adapted to determine, from the simulation of the technical system, the sensitivity of sets of setting parameters to changes in the setting constants.

33. (Previously Presented) The computer program product of claim 13, including a computer readable medium.

34. (Previously Presented) The computer program product of claim 13, further comprising a fourth program segment, adapted to cause the processor unit to design the technical system on the basis of the simulation.

35. (Previously Presented) The computer program product of claim 13, wherein the design process includes at least one of an adaptation of, a change to, and a redesign of the technical system.

36. (Currently Amended) The computer program product of claim 13, further comprising a fourth program segment, adapted to cause the processor unit to redetermine the influence of the setting parameters on the technical system by accessing the temporarily stored result.

37. (Currently Amended) The computer program product of claim 13, wherein the influence of each of a plurality of sets of setting parameters on the technical system is determined by checking the external source, and wherein the result of this check is temporarily stored.

38. (Previously Presented) The computer program product of claim 37, wherein an additional influence is determined on the basis of the temporarily stored results.

39. (Previously Presented) The computer program product of claim 38, wherein the additional influence is determined by at least one of interpolation and extrapolation.

40. (Previously Presented) The computer program product of claim 38, wherein the additional influence is determined from the results using a neural network.

41. (Previously Presented) The computer program product of claim 13, wherein the external source is at least one of a simulator and an experiment.

42. (Previously Presented) The computer program product of claim 13, wherein the simulation is carried out using a plurality of results, without the

external source.

43. (Currently Amended) The computer program product of claim 13, further comprising a fourth program segment, adapted to cause the processor unit to determine the influence of the set of setting parameters on the technical system by accessing the temporarily stored result determining, from the simulation of the technical system, the sensitivity of sets of setting parameters to changes in the setting constants.